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MYSTERIES OF MIND SPACE & TIME

Psi wars

The Bermuda Triangle **Constellation makers** Von Daniken on trial

Murder by UFO



Unexpla

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The mysterious disappearance of ships and aircraft in an area of the North Atlantic has led to the belief that the region is host to strange and powerful hostile forces.

PAUL BEGG gives the background to the legend

MERE MENTION of the Bermuda Triangle is likely to enliven any flagging conversation and set people's spines tingling almost anywhere in the world. It has been the subject of books, novels, films, television dramas and documentaries, newspaper and magazine articles – even a board game. The Bermuda Triangle – formed by an imaginary line connecting Bermuda with Puerto Rico and the coast of Florida – is the place where scores of ships and aircraft are said to have vanished without trace. Dozens of researchers and writers are convinced that the losses are caused by some kind of force or phenomenon unknown to science.

Charles Berlitz, author of two best-sellers about the region, *The Bermuda Triangle* and *Without a trace*, has written:

Large and small boats have disappeared without leaving wreckage, as if they and their crews had been snatched into another dimension... in no other area have the unexplained disappearances been so numerous, so well recorded, so sudden, and attended by such unusual circumstances, some of



Above: Charles Berlitz has done most to foster the idea that disappearances in the Bermuda Triangle are the result of extraordinary happenings

Below: the island of Bermuda in the Atlantic. Is it at the centre of a whole series of sinister events? which push the element of coincidence to the borders of impossibility.

'The number of disappearances are out of all proportion to the number of losses elsewhere,' writes Ivan T. Sanderson in *Invisible residents*. And John Wallace Spencer claims in *Limbo of the lost*: 'Tragedies connected with this region continually occur without explanation, without pattern, without warning, and without reason.'

Bermuda has had an evil reputation for generations. Its 300 or so tiny islands were discovered in 1515 by Juan de Bermúdez. Yet, despite an equitable climate, plentiful supplies of fresh food and water, and an ideal location for a mid-ocean refuge and provisioning base, the islands were shunned for almost a century after their discovery. They were feared by the tough Elizabethan sailors, Shakespeare called them 'the still-vex'd Bermoothes', and they gained an evil reputation as a place of devils. Nobody knows why. Perhaps the only reasonable explanation is that then, as now, the region was known as the home of inexplicable forces that made men and ships disappear.

According to writers on the subject, the modern catalogue of losses in the region begins in 1800 with the disappearance of the USS *Pickering*. In 1854 the British ship *Bella* disappeared en route from Rio de Janeiro to Jamaica, although she was known to have

Tales from the Bermuda Triangle



Bermuda Triangle

been dangerously overloaded and may simply have capsized. In 1866 the Triangle claimed the Swedish barque Lotta and two years later the Spanish merchantman Viego vanished. In 1872 the crew of the Mary Celeste disappeared and the vessel was found drifting between the Azores and Gibraltar (see page 950). Although this is far outside the accepted limits of the Bermuda Triangle, the Mary Celeste is often referred to in discussion of the subject. The British training ship Atalanta and her 290 cadets and crew sailed into oblivion in 1880. They were followed in 1884 by the Italian schooner Miramon.

It is said that in 1902 the German barque Freya, sailing from Manzanillo in Cuba to Punta Arenas, Chile, was found in the Triangle. Her crew had disappeared. The vessel itself was listing badly, was partly dismasted and showed every sign of having been caught in a particularly violent storm—but there had not been any storms; weather records revealed that only light airs had prevailed.

In 1918 the large collier Cyclops mysteriously vanished. She had carried a radio but no distress message had been received. A message was sent by the Japanese freighter Raifuku Maru in 1925 but it only intensified the mystery because the radio operator is reported as saying: 'Danger like dagger now. Come quick!' What kind of danger looks like a dagger? Was dagger the only comparison the terrified radio operator could draw to the unworldly something that threatened and eventually took his ship? Thirteen years later, in 1938, the blue skies were cloudless and the sea was still when the steamship Anglo-Australian radioed an 'all's well'



Above: Ivan T. Sanderson has suggested that the Bermuda Triangle is one of 12 'vile vortices' on Earth, regions where the rate of disappearance of ships and aircraft is unusually high

Below: the Bermuda Triangle is usually represented as a region touching Florida and the islands of Puerto Rico and Bermuda. But some writers extend it much further and refer to it as the 'Devil's Triangle' and 'Limbo of the Lost'

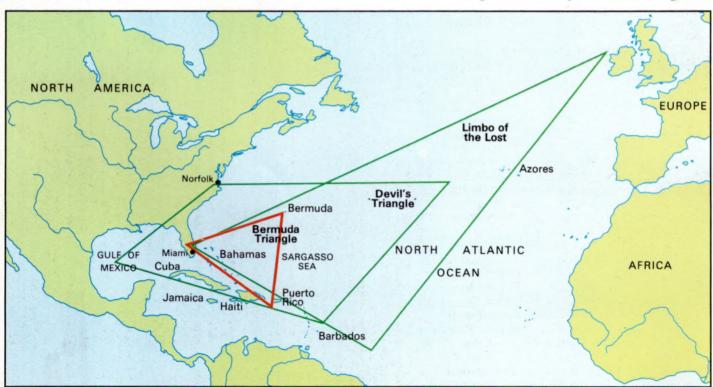
message before sailing into the Bermuda Triangle. She never emerged.

Although the Bermuda Triangle has been claiming ships since the days when Christopher Columbus sailed its waters, it did not begin to attract attention until 1945. That year five us Navy bombers - Flight 19 vanished after sending a series of baffling and bizarre radio messages. A few years later the writer Vincent Gaddis called the region the Bermuda Triangle. There is little agreement among writers on its size and shape, and each region is given a different name such as Devil's Triangle and Limbo of the Lost. At its smallest, however, the Bermuda Triangle is the size of the United Kingdom and Eire, and at its largest it takes in about half the North Atlantic Ocean.

Charles Berlitz and other writers such as Richard Winer, John Wallace Spencer, Vincent Gaddis, John Godwin, Ivan T. Sanderson, Adi-Kent Thomas Jeffrey and Alan Landsberg maintain that the mystery of the Triangle cannot be explained by storms and other natural causes. They believe that the disappearances were caused by a phenomenon unknown to orthodox science.

Vanishing aircraft

In January 1948 the British airliner Star Tiger was nearing the end of a routine flight from the Azores to Bermuda when she is said to have radioed: 'Weather and performance excellent. Expect to arrive on schedule.' But the aircraft did not arrive at all. While a search was being made for survivors or wreckage, radio stations picked up a couple of faint messages purporting to be from the aircraft. It was 'as if the final message was being sent or relayed from a far greater





Left: the coast of Florida in 1563, as shown on a map by Lazaro Luis. Christopher Columbus travelled through the area now known as the Bermuda Triangle in the late 15th century and noted that his ship's compass acted erratically. He also recorded that a 'great flame of fire' fell into the sea

Below: an Avenger torpedo bomber of the type that vanished in December 1945 after leaving Fort Lauderdale naval air base for a brief training flight off the Florida coast. No trace of the five aircraft and 14 crew was ever found, despite an extensive search. This case, one of the most celebrated mysteries of aviation history, has been called 'the Mary Celeste of the sky'

Bermuda Triangle. It seemed that something prevented the satellite transmitting information to receiving stations. 'We are talking about a force we know nothing about,' Meshejian is quoted as saying.

Even more alarming is the claim that the Bermuda Triangle is not unique. The late Ivan T. Sanderson plotted the location of dozens of air and sea losses and concluded that at least 12 similar regions – he called them 'vile vortices' – encircle our globe. 'Planes, ships, and subs have, as we have stressed, been disappearing all over the world,' he wrote in his book *Invisible residents*, 'but it has to be admitted that many more are reported to have done so in these . . . areas than in any others.'

One such 'vile vortex' has long been known to lie off the coast of Japan. Called the Devil's Sea, it has been claiming small fishing craft of doubtful stability for hundreds of years. Between 1950 and 1954 no less than nine large coastal freighters went missing. The authorities were so alarmed that in 1955 they dispatched a team of scientists aboard the survey ship *Kaiyo Maru No. 5* to investigate the region. To everybody's horror the *Kaiyo Maru No. 5* and her scientists and crew inexplicably vanished. As a consequence the Japanese declared the region an official danger zone.

Unlike their Japanese counterparts the United States authorities have not declared the Bermuda Triangle a danger zone. Indeed, they deny that anything at all unusual is happening there. This official view, however, does not accord with private opinions expressed in unguarded moments. One Navy spokesman let slip: 'We know there's something strange going on out there,

distance, in space or time,' wrote Charles Berlitz.

Another airliner, a Douglas DC-3, vanished on a flight from Puerto Rico to Florida in December 1948. The pilot allegedly radioed: 'We are approaching the field . . . only fifty miles [80 kilometres] to the south. . . . We can see the lights of Miami now . . . all's well. Will stand by for landing instructions.' But when Miami replied a few minutes later she received no reply. Not another word was ever heard from the aircraft. The DC-3 had vanished over an area where the water was only 20 feet (6 metres) deep, yet search craft failed to locate any wreckage or survivors.

In June 1950 in calm seas and in good weather the Costa Rican freighter *Sandra* and her crew of 28 vanished. 'What could have happened to her? No one has the least idea,' says Adi-Kent Thomas Jeffrey.

The extent of the Triangle's range of influence startled researchers when Professor Wayne Meshejian announced that a sophisticated weather satellite operated by the National Oceanographic Administration consistently malfunctioned when over the



Bermuda Triangle

we've always known it, but there doesn't seem to be any reason for it at all.' And a senior intelligence officer of the Third Naval District is on record as saying: 'Nobody in the Navy sneers at this thing.' The authorities, it seems, are engaged in a cover-up to conceal their ignorance from the public.

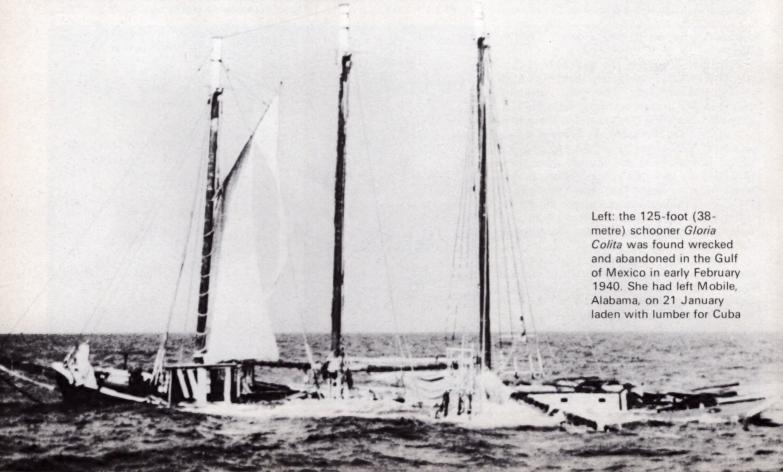
There is little agreement about what 'this thing' in the Bermuda Triangle is. John Wallace Spencer is convinced that UFOs provide the only acceptable solution. Ships and aircraft 'are actually being taken away from our planet,' he says. Looking down instead of up, Ivan T. Sanderson suggested that a highly intelligent civilisation may have evolved on or below the sea bed and that the disappearances are connected with their periodic examination of mankind.

Other suggestions have ranged from mini black holes to openings to other dimensions where time runs quickly, slowly or not at all.



That this latter theory may not be as absurd as it sounds is indicated by the experience of a young pilot named Bruce Gernon. In 1970 he was piloting his small aircraft when he flew through a strange cloud. On landing at Miami he discovered that his flight had taken half an hour less than it was possible for it to have done. Did Gernon fly into another dimension and out again? Unfortunately, his flight plan is missing and there is no way of checking and corroborating his story.

A similar happening is said to have been experienced by the passengers and crew of an Eastern Airlines aircraft that vanished from



Left: the United States nuclear submarine *Scorpion* sank in May 1968 with the loss of her 99 crew southwest of the Azores. Although this is far outside the usual limits of the Bermuda Triangle the *Scorpion* is regularly included among its victims. A court of enquiry was unable to explain the sinking

Below left: the *Anita*, a Norwegian freighter, left Norfolk, Virginia, on 21 March 1973 bound for Hamburg with a cargo of coal. She disappeared a few days later, after storms had lashed the area she was known to be passing through. None of her 32 crew survived

the radar at Miami for 10 minutes. Full emergency operations were launched but then the airliner reappeared and landed safely. Nobody on board had experienced anything odd and they had no explanation for the fact that every clock and watch on board was found to be 10 minutes slow.

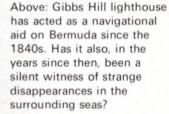
Charles Berlitz believes that the remains of the fabled lost continent of Atlantis have been found off Bimini in the Bahamas. Many people believe that Atlantis was the home of a technological super race and that one of their machines or weapons is still functioning, disintegrating our ships and aircraft.

'Could magnetism or some form of magnetic phenomenon be related to the strange disappearances?' asks Richard Winer, author of *The Devil's Triangle*. Few writers have failed to mention how the compass needle usually points to the magnetic north pole rather than to the actual North Pole – except, however, in the Bermuda Triangle.

The Bermuda Triangle is clearly a strange place and strange things happen there. Hundreds of ships and aircraft have inexplicably vanished without trace. They hardly ever send a distress call and wreckage is rarely found. Furthermore, as John Godwin has written in *This baffling world*, 'we find that almost monotonously fine weather conditions prevailed at the crucial times.' He goes on to ask: 'Did the lost airplanes and lost ships encounter phenomena unknown to today's science? Do the laws of nature still contain a few paragraphs not covered in our textbooks?' We shall see.

Is the Bermuda Triangle genuine mystery or largely myth? See page 1286





Left: the Bermuda Triangle provided the basis for a suitably lurid storyline for a 1978 film directed by Richard Friedenburg. Stars included Brad Crandall and Donald Albee



The Third World War?

One of the most disturbing rumours to arise in the late 20th century is that the Soviets have mastered the art of mass mind control — and that they are already using it. GUY LYON PLAYFAIR sums up the evidence

ASTRAL ESPIONAGE; subliminal propaganda by telepathy; thought-moulding of Western leaders; bioenergy as an anti-personnel weapon; knocking out military equipment and space vehicles with psychokinesis - these are not jottings from a science-fiction writer's notebook but some of the techniques solemnly discussed in two reports compiled in 1972 and 1975 for the US Defense Intelligence Agency (DIA) under the titles 'Controlled offensive behavior - USSR' and 'Soviet and Czechoslovak parapsychology research'. The former was scheduled for declassification only in 1990, but has been obtained under the Freedom of Information Act, and while parts of the documents may strain the credulity of the most avid sciencefiction fan, a study of them in conjunction with other published information points to the possibility that the Third World War was well under way by the mid 1970s - and that the West was losing it.

According to the DIA reports, the Soviets had a start of several decades over the West in officially funded research into psychic phenomena, especially telepathy, and their top priority has always been practical application. In other words, while the West was holding psychical research at arm's length, or even arguing it out of existence, the Soviets

Right: Shawn Robbins,
American psychic, who has
revealed that the US Navy
once invited her to take part
in a project similar to
Stanford Research Institute's
remote viewing experiments.
There is some evidence that
many other psychics in
Western countries have at
least been approached by
their governments as
potential subjects in largescale ESP experiments

Below: an early warning station. But what warning would we have if the USSR were to direct weapons of mind control at us?



were looking for – and finding – ways of making telepathy and psychokinesis (PK) work for them.

However, a 1976 report (allegedly funded by one of the US intelligence agencies) was more cautious. Surveying the published literature on what its authors term 'novel biophysical information transfer' (NBIT) – comprising both telepathy and PK – this study concluded that, although most published material was 'confusing, inaccurate and of little value from a scientific point of





Left: Jack Anderson, US columnist and investigative reporter, who announced in early 1981 that the Pentagon had been training a 'psychic task force' (which he also dubbed the 'voodoo warriors') since 1976. Although he treated the subject lightheartedly, other writers, including senior officers of the US Army, viewed it with grave concern

view', there was good reason to suppose that secret psi research was indeed going on in the Soviet Union, the results of which were intended to be made use of by the military and secret police. One of the authors of the report was later quoted as saying, 'I believe the Soviets are actually building prototype equipment for psychic warfare.'

It became known in 1980, thanks to successful use of the Freedom of Information Act by us journalist Randy Fitzgerald, that the Central Intelligence Agency's involvement in psychic matters could be traced back at least to 1952. In a CIA document dated 7 January of that year, the remarkable claim was made that 'it looks as if . . . the problem of getting and maintaining control over the ESP function has been solved,' and it was recommended that 'suitable subjects' should be trained and put to work as psychic spies. A well-known American psychic, Shawn Robbins, later revealed that she had been invited to take part in a Us Navy project along the lines of the remote viewing experiments carried out at Stanford Research Institute (SRI) with Ingo Swann and Pat Price (see page 1115).

Finally, early in 1981, psychic warfare made headlines in the USA when columnist Jack Anderson announced that the Pentagon had been maintaining a secret 'psychic task force' since 1976. 'The brass hats,' he said, 'are indeed dabbling in the dark arts.' Anderson does not seem to have taken the activities of what he calls 'the voodoo warriors' very seriously, yet by a curious coincidence the first of his two columns appeared just after a much more thoroughly researched piece on psychotronic warfare in *Military Review*

Above: Thomas E. Bearden, a retired US Army officer with a background in defence systems. He believes that the Soviets possess at least 26 devices that employ psychotronic weaponry, including a machine that can broadcast 'disease patterns' and generate earthquakes. Author Lyall Watson discusses Bearden's ideas in *Lifetide* and finds them 'horribly plausible'

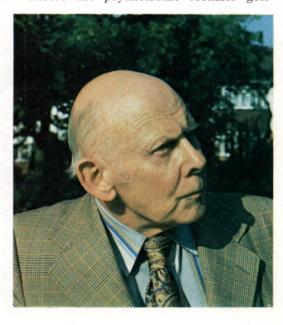
Right: Richard Deacon, the British author of several books on espionage. He devotes a whole chapter of his *The Israeli secret service* to 'psychic espionage' (December 1980) – no less than the professional journal of the US Army.

The article, on 'The new mental battlefield', was humorously subtitled 'Beam me up, Spock'. But there was nothing funny in the eight-page text, written by Lieutenant-Colonel J.B. Alexander, a holder of three university degrees who had clearly done his homework. Psychotronic research had been under way for years, he wrote, and its potential use in weaponry had been explored. 'To be more specific,' he went on, 'there are weapons systems that operate on the power of the mind and whose lethal capacity has already been demonstrated.' After a candid and open-minded survey of his subject, he admitted that some would find it ridiculous 'since it does not conform to their view of reality'. However, he added, 'some people still believe the world is flat', and he called for more co-ordinated research into the paranormal, recommending that leaders 'at all levels' should be provided with 'a basic understanding of weapons systems they may encounter in the not-too-distant future'.

A terrifying arsenal

Some indication of just what these weapons might be has been given by Thomas E. Bearden, a retired us Army officer with long experience in nuclear engineering, war games analysis and air defence systems. He describes a terrifying arsenal of some 26 devices, ranging from machines that modify the weather and broadcast 'disease patterns' to the 'hyperspace nuclear howitzer' and even an earthquake generator. Bearden uses quantum mechanics and Jungian psychology to build a model of psychotronic reality that is unlikely to conform to the views of many, although Lyall Watson, who discusses Bearden's theories in his book *Lifetide*, finds some of his ideas 'horribly plausible' and senses 'a rightness in his approach'.

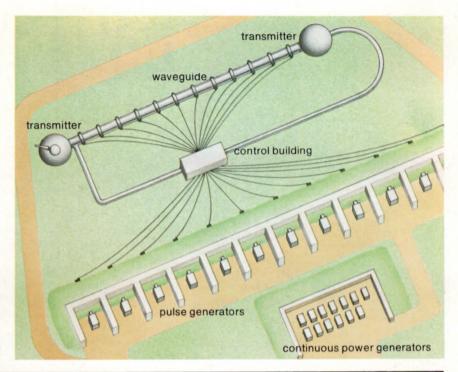
Before the psychotronic scenario gets



even more bizarre, two questions must be asked: who is winning the psi arms race, and is there any real evidence that any psi weaponry has ever been used?

According to Richard Deacon, author of several studies of international espionage, the first country to take the lead in psi warfare techniques could achieve 'something like total superiority'. And, he says, the country with the most active interest in and best information on the subject is neither of the superpowers, but Israel. Quoting intelligence sources, Deacon states that the Israelis have first-hand knowledge of military psi research in seven Russian cities and at least four Eastern European countries. One of the Israelis' most alarming claims is that the Soviets were working in the mid 1970s on 'subliminal conditioning' by telepathy, through 'transference of behaviour impulses'. According to Deacon's source, telepathic mind control had already been put into practice.

In 1976, one possible means by which this could be done became public knowledge. In



A pawn in their game

Anatoli Karpov, Soviet grand master, and Viktor Korchnoi, the Soviet defector, during their intense battle of wits at the 1978 World Chess Championship at Baguio City in the Philippines Who really won the 1978 World Chess Championship – Soviet grand master Anatoli Karpov, Soviet defector Viktor Korchnoi, or a mysterious man named Dr Vladimir Zukhar? According to the record books, it was the seemingly unflappable Karpov who retained his title after winning five games out of the first six, losing the next four, and finally returning to form and sweeping the board.

The more volatile Korchnoi thought otherwise. Dr Zukhar, he alleged, was a psychic saboteur sent to Baguio City in the Philippines to make sure that Karpov avoided losing to a defector.

Korchnoi obviously believed that psychic powers could affect his game, for he took countermeasures of his own, in the form of training in yoga and meditation from a couple of American members of the Anand Marg sect who happened to be in town. They also taught

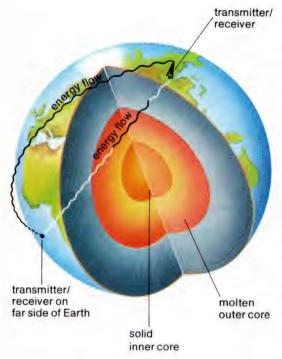
him a Sanskrit mantra to ward off evil, which he claimed to have used against Zukhar with devastating effect.

This was not the first time psychic matters had been raised at a world chess tournament. Interestingly, it was the Soviets who cried foul play at the 1972 confrontation between Bobby Fischer and Boris Spassky, suggesting not only that Fischer's chair was wired to receive messages from accomplices, but that Fischer, or at any rate somebody, was actually trying to cast an evil spell over Spassky. And at the world title elimination bout in 1977, Spassky had part of the stage screened off, so that he could hide from both Korchnoi and the audience. The former was paralysing his mind, he said, while the latter were beaming rays at him.

Could Dr Zukhar have helped Karpov win in 1978? By then, the Soviets had more than 50 years of state-backed research in telepathy to draw on, and if scientists in the 1920s could broadcast suggestions that subjects should scratch their noses, it seems possible that Zukhar could make Korchnoi move the wrong pawn at the wrong time.

'Chess is almost the perfect game for PK effects to make a real difference,' says Dr Carl Sargent, a Cambridge parapsychologist and chess enthusiast. 'One lapse of concentration may mean the blunder which costs the game or even the match.' And, he notes, a feature of the Korchnoi-Karpov games in 1978 was the number lost by apparent mistakes rather than won by skill.





that year, a number of new Soviet radio stations went on the air, mystifying listeners around the world by confining their programme content to a loud and steady rattle. One of these stations, at Gomel (near Minsk), was believed to have 20 times the peak output of any previously known transmitter, and the Soviet 'woodpecker' (which is what it sounded like) was splashing across several frequencies on the short-wave band and even interfering with telephones.

Telecommunications companies, amateur radio societies and several governments complained to the Soviet Union. The Soviets apologised, said they were carrying out 'experiments' and promised to minimise disruption. But they never explained what they were doing, and early guesses were that they were working on a new form of over-thehorizon radar. Then, in November 1977, the American psychical investigator Andrija Puharich startled a London audience with a detailed account of what he believed was really going on. 'It isn't that they are interfering with radio and telephone systems,' he said. 'They are actually interfering with your heads. Somebody, far away, is playing with your minds.' He went on to explain how they were doing it.

The Soviets, he said, had put into practice an idea originally thought up by Nikola Tesla (1857–1943) around the turn of the century (see page 981), and were using their transmitters to set up a colossal stationary wave passing through the core of the earth and carrying a signal tuned to resonate with the earth–atmosphere system. This signal was being pulsed at frequencies in the extremely low frequency (ELF) band, of 4 to 15 pulses per second, a range of special importance to the human brain, comprising the theta and alpha bands.

Left: diagram showing the theoretical application of one of Nikola Tesla's ideas: beaming radio waves through the Earth's core, which would carry psychotronic signals – designed to destroy human brain waves

Far left: diagram of a secret Soviet installation observed at Saryshagan in the USSR. Some observers believe it houses a laser beam weapon or particle beam weapon but Thomas E. Bearden believes it is based on a Tesla invention and can be used to form a 'bubble' of energy – a force field. This could be employed as a defensive shield, or actively, against enemy aircraft

Below: a scene from the 1977 MGM film *Telefon* in which a mad Soviet agent, 'Telefon' (played by Donald Pleasance), activates 'sleepers' using an hypnotic code. They then blow up US military bases

Further reading

Martin Ebon (ed.), Psychic discoveries by the Russians, Signet (New York) 1971 Milan Ryzl, Parapsychology, a scientific approach, Hawthorn (New York) 1970 L. L. Vasiliev, Experiments in distant influence, Wildwood House 1976

In laboratory experiments, Puharich found that brain rhythms fell into step with whatever frequency in these bands was being beamed at them, even when the subject was in a shielded metal Faraday cage. Fine tuning of the pulse rate could produce a wide range of symptoms, from tension headaches to nausea and drowsiness, and this sinister process of 'bioentrainment' was being tried out on the country selected for the Soviet 'experiment' – Canada.

This was not all. Puharich reckoned that ways had been found to get the psychotronic effect, in the form of a telepathic signal, onto the woodpecker signal. Something like this had been specifically predicted in detail by the authors of the 1976 report mentioned above. Therefore, fantastic as it may seem, it is an idea that has occurred to others besides Puharich. It has often been noted that the physicist Dr Ippolit M. Kogan put forward a hypothesis in the 1960s on the use of ELF waves as carriers of telepathy, and that after 1969 Kogan's name completely disappeared from the published literature, nobody in the West hearing any more from him. And Western parascientists noticed that any accounts of psychical research published by the Soviets after 1970 described old, wellknown experiments, as if their real work in this field were suddenly deemed top secret.

'Fighting is the most primitive way of making war on your enemies,' wrote the Chinese philosopher Sun Tzu some 2400 years ago. 'The supreme excellence,' he said, 'is to subdue the armies of your enemies without having to fight them.' At the start of the 1980s, it seemed that it would soon be known if any nation had managed to achieve this supreme excellence through psychotronic weaponry, or whether the whole subject of psi warfare was destined to rest where many believed it always belonged – in the realm of science fiction.



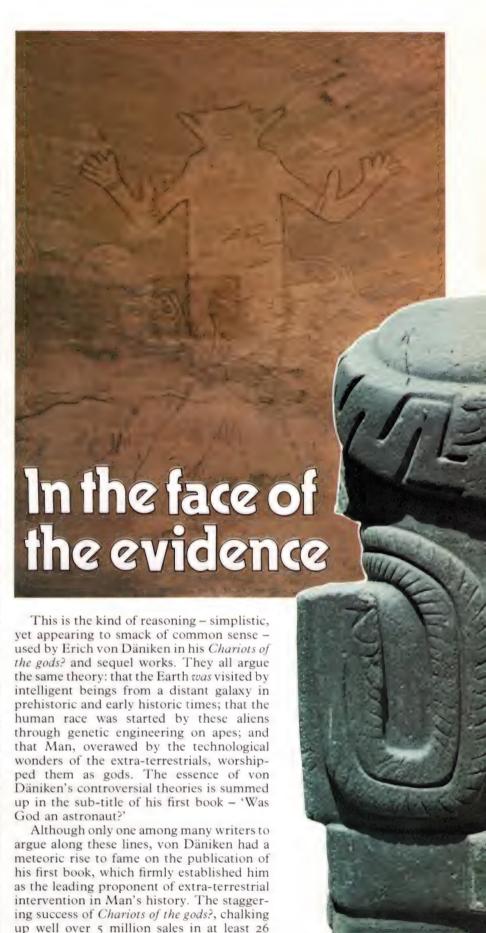
Erich von Däniken startled the world and gained international fame by suggesting that superior space-beings visited Earth in ancient times. But how much credence do his views really deserve? PETER JAMES gives a frank assessment

ALL GENUINE MYTHS contain a kernel of truth. It might be a human psychological yearning for some higher state, as in the myths of the 'Superman'. Or it might be an indication of the importance, no longer understood, once attached to some special place such as a megalithic site. Other myths reflect memories of historical events and people, like King Arthur or the Emperor Charlemagne. Some may even take us a surprising way back into prehistory. The North American Indian stories concerning the time when their world was dominated by the 'Big Snow' sound like a description of the last ice age, which ended 10,000 years ago.

But how do we understand those myths that read like pure fiction, yet occur in slightly different versions in the traditions of ancient peoples and tribal cultures from widely separated parts of the globe? They include the stories of the 'gods', or 'sky people', or beings from stars, who came down to Earth and civilised mankind (see page 1221). They flew, we are sometimes told, in winged or fiery chariots, and a few select mortals were given rides or carried off in them. These visitors from 'heaven' were even supposed to have taken human partners, breeding demigods who became kings and wisemen. So where did these stories come from? Should we try to explain them, like beliefs in the afterlife, in terms of Man's psychological needs? Or are we missing the point if we do not give these myths a chance and try to interpret them at their face value?

A possible explanation

Many people believe that with the benefit of 20th-century scientific knowledge we can now understand such myths in ways that simply were not available to scholars of previous centuries. Today, the possibility (at least) of extra-terrestrial life-forms is one that most people are happy to entertain. As Man begins the long trek into the solar system and the investigation of other worlds, the question of whether our own planet has been already visited by some other intelligent life-form has arisen quite naturally. Could the idea of the 'gods from heaven' be ancient Man's attempt to describe his own experience of beings from other worlds, in the days before it was really known that such worlds existed? And wouldn't tales of fiery chariots that flew through the air be the only way that ancient Man could describe the kinds of air and space travel we now know to be possible?



languages, transformed a once bankrupt

Swiss hotelier with an ambition to travel into

the champion of the 'space gods', who now

Left: for von Däniken, this intriguing figure from a rock painting in the Tassili mountains of Algeria depicts a spaceman making a visit to Earth centuries ago. The ethereal form contrasts with the more solid drawings in the group

At Tiahuanaco, Bolivia, impressive sculptures and monuments (below and below right) proclaim stupendous building feats by ancient Man – or are they the result of extra-terrestrial intervention?



pursues his quest for 'final proof' around the globe with an almost messianic zeal. His success is particularly amazing as hardly a single thought contained in his books is original. Every link in the von Däniken argument can be found in the work of earlier, often far sounder, exponents of the 'ancient astronaut' theme. Archaeologists and theologians reacted with outrage, however, denouncing him as a fraud and a charlatan.

Von Däniken assures us that he has plenty of 'hard proof' that extra-terrestrials have visited and 'deposited physical signs of their presence on Earth'. He crams his books with details of ancient artefacts claimed to be representations of spacemen, rockets, aerials, and even heart-transplants, and describes feats of engineering that 'couldn't possibly' have been managed by ancient Man without 'outside help'.

But most of his evidence is a mish-mash of half-truths, cooked up with insinuations made in the form of questions. The argument is sometimes so thin that von Däniken has used the vagueness of his own questionwithout-answer style of writing to wriggle on the hook when critics have caught him out. The famous ground drawings at Nazca in Peru (see page 310) were described by him in Chariots of the gods? as follows: 'Seen from the air, the clear-cut impression that the . . . plain of Nazca made on me was that of an airfield!' And his other comments make it perfectly clear that this is what he wants the reader to believe. The real nature of the Nazca lines has been studied at first hand since the 1940s by the German scientist Maria Reiche, who has not found the slightest trace of extra-terrestrial landings. At the mention of von Däniken's airstrips, she smiled and remarked: 'Once you remove the

stones, the ground is quite soft. I'm afraid the spacemen would have gotten stuck.'

In a debate with a sceptical Colin Wilson in the magazine Second Look (January 1979), von Däniken tried to soft-pedal on the question of the Nazca lines: 'I have not claimed that extra-terrestrials had built the lines at Nazca. I have only said these tracks were the result of some sort of cargo-cult of the natives there.' He challenged Wilson to produce a statement from one of his books to the effect that the lines were built 'by or with the help of extra-terrestrials'. On Wilson's behalf, here is an extract from von Däniken's Return to the stars:

At some time in the past, unknown intelligences landed on the uninhabited plain near the present-day town of Nazca and built an improvised airfield for their spacecraft which were to operate in the vicinity of the earth. They laid down two runways on the ideal terrain.

And in *Chariots of the gods?* von Däniken claimed that the lines in general 'could also have been built according to instructions from an aircraft'.

He has been forced to back down on many other points. With regard to the non-rusting pillar at Meharauli, India (see page 755), which he misdated and wrongly described, he later admitted in an interview in *Playboy* magazine:

the information I had concerning this iron column was as I presented it. Since then, I have found that investigations were made and they came to quite different results, so we can forget about this iron thing.

Another classic case is the question of the





secret system of tunnels beneath the mountains of Ecuador, containing mysterious treasures of prehistoric artefacts and a 'library' of metal plates inscribed with records of a visit by 'space gods'; a description of these supposed relics forms the centrepiece of von Däniken's *The gold of the gods* (1970). He claims to have explored this vast underground network with the help of Juan Moricz, self-styled discoverer and 'keeper' of the tunnels. He described his experiences in graphic detail:

. . . we switched on our torches and the lamps on our helmets, and there in front of us was the gaping hole which led down into the depths. . . . We slid down a rope to the first platform.

As he marvelled at the wonders contained in the tunnels, such as the metal plates covered with a bizarre and unknown script, von

> Top: Erich von Däniken, most celebrated of the 'ancient astronaut' theorists

Above: this cave drawing from Soledad in the Baja peninsula of Mexico is said to show a flying saucer belching flames from its underside. Does it constitute 'evidence' of a visiting spacecraft in ancient times?

Left: the candelabra 'tree of life' above Pisco in Peru is a mysterious set of lines that some people say point towards Nazca, about 120 miles (190 kilometres) away. One view is that it is a 19th-century navigational aid

Däniken said he 'felt tremendously happy', though he 'had the feeling of being constantly watched'.

This 'expedition' to the Ecuadorean tunnels became the subject of a farcical controversy between von Däniken and Juan Moricz. Four months after the publication of The gold of the gods, von Däniken admitted to two editors of Der Spiegel that he had never been to the part of Ecuador in question, though he had done some underground exploring 60 miles (100 kilometres) away near the town of Cuenca. And in his Playboy interview he admitted that the dramatic details of his adventures in the tunnels were largely imaginary, but excusable on grounds of 'author's licence'. Meanwhile, Moricz stated categorically in an interview that 'Däniken never set foot in the caves. . . . If he



have merely shown von Däniken a sideentrance to the tunnel network: 'You
couldn't enter the cave, though, it's blocked.'
As for the treasures, Moricz says these were
photographed by von Däniken in a local
museum, 'but most of the contents are junk'.

Moricz himself is an ambiguous character: his 'ownership' of the tunnels has been
disputed, and no reputable archaeologist or

ter: his 'ownership' of the tunnels has been disputed, and no reputable archaeologist or geologist has seemingly been allowed anywhere near the mysterious caverns containing the library, which he continues to claim are genuine. Though he states he showed nothing of importance to von Däniken, Moricz began legal proceedings against him, demanding a percentage of von Däniken's royalties for illegally publicising his own discoveries.

says he personally saw the library and the

other things, he's lying.' Moricz claims to

Despite his previous admissions, von Däniken still claimed in the Second Look article: 'What I have said in The gold of the gods about



these underground caves is all true.' He insists that he saw the metal library with his own eyes and, according to his biographer Peter Krassa, he knows intuitively that the tunnels contain *the* proof of his theories.

Paucity of evidence

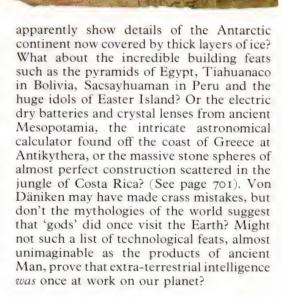
Despite the claims put forward in The gold of the gods, and in numerous interviews and articles, no one has yet produced the slightest scrap of evidence that there is anything 'extra-terrestrial' about the supposed discoveries. Even if the tunnels are artificial though a local geological authority thinks they are natural formations – and even if they do contain gold objects and a 'mysterious' library with an undeciphered script, so what? How do the 'ancient astronauts' benefit from all this? Von Däniken repeated Moricz's assertion that the library 'might contain a synopsis of the history of humanity, as well as an account of the origin of mankind on earth and information about a vanished civilisation'. But neither von Däniken nor Moricz claims to have deciphered a single letter of the script. And far from producing any relics manufactured by an unknown alien race, all the objects that they display as spoils of the caves are rather unsophisticated-looking objects of tin and brass (not gold) that could be made by any competent smith. Yet The gold of the gods announces the evidence from the tunnels as 'the most incredible, fantastic story of the century'

Small wonder, then, that von Däniken's critics have often labelled him a fraud. But despite the numerous instances where von Däniken has been shown to have fudged his facts, sometimes on his own admission, millions of his readers still feel convinced by the bulk of the evidence in *Chariots of the gods?*, and the similar arguments put forward by other writers in books like it. What about the Piri Re'is and other Renaissance maps that



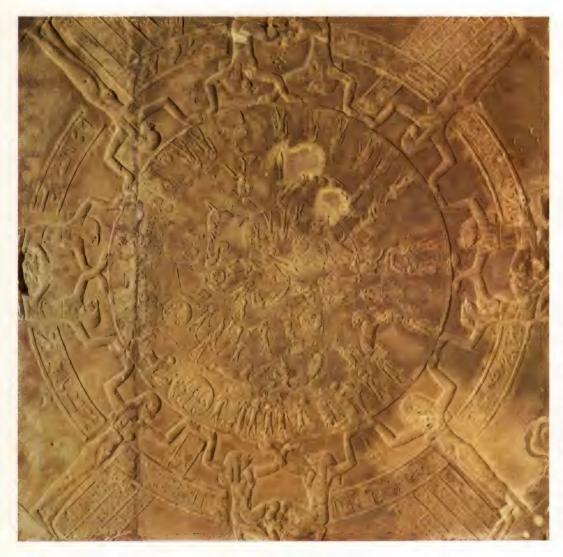
Above: the Piri Re'is map, dated 1513, is said by von Däniken to show mountains in Antarctica – centuries before they were discovered by Europeans – buried deep under snow and ice. Von Däniken says the map is based on aerial photographs. Cartographers have pointed out that the map holds few mysteries and is a noticeably inaccurate compilation of several different charts

Left: the lines at Nazca, Peru, a focus of controversy in the debate about visitations to Earth by beings from space



How does the idea of 'ancient astronauts' differ from folk tales and modern UFO encounters? See page 1294





The constellations of the ancient Egyptians, engraved on a relief in the temple at Dandara, on the Nile. In this portrayal, dating from about the first century BC, the zodiacal figures, taken over from the Romans, are very similar to those we know. But instead of the Great Bear there is the figure of a crocodile (just below centre), while above it and to its left sits the figure of a monkey. Twelve deities support the heavens

Stars in their eyes

Which of the great seafaring civilisations of the ancient world first imagined the constellation figures that have guided navigators ever since? ARCHIE ROY considers the most likely candidates — and proposes an answer

WE NOW HAVE ANSWERS to the questions 'When?', 'Where?' and 'Why?' regarding the origin of the constellation figures. A reasonable average figure for the date is 2300 BC, with an uncertainty of about 300 years either way. The most likely latitude for the constellation makers is 36° north, plus or minus 1^{10}_{2} . And we can be pretty sure that the constellations were used for navigation.

There are four likely answers to the last question: 'Who were the constellation makers?' – the Phoenicians, the Egyptians, the Babylonians and the Minoans.

In some ways the Phoenicians are obvious candidates for the role of the navigator people who used the constellation system described in Aratus's poem. Their cities – among them Arwad, Tyre, Sidon, Beirut and

Byblos – occupied the area we now know as Lebanon. Great traders and wanderers, the Phoenicians' most prosperous period lay in the years between 1500 BC and 500 BC.

According to Aratus, the Sidonians (that is, the Phoenicians) navigated by the constellation of the Little Bear, or Cynosura (see page 1258). They therefore used the sky to that extent for navigational purposes.

But they must be ruled out of the contest as the creators of the constellations. The mythology recorded in Aratus does not fit theirs, and although they lived at the right latitude, they became active seafarers too recently to meet the requirement of date.

The early date of the constellations' origins is no problem in the case of the Egyptians, whose civilisation is one of the oldest on record. The splendours of the Old Kingdom were appearing at the time that the constellation makers were doing their work. As early as 2800 BC, Egypt was making brilliant achievements in art, astronomy, civil engineering, mathematics, medicine and other

skills. We know that the astronomer-priests mapped out the sky to the extent of using the stars to tell time at night, as early as the 24th century BC.

Perhaps the best-known of the monuments displaying constellation figures is that found in the temple of Dandara. The 12 zodiacal constellations that it shows are essentially those described by Aratus. The other constellations, however, are markedly different. They include a crocodile, in place of the Great Bear, an ape and a hippopotamus.

Since so much of the Egyptian way of life has survived, it seems likely that clearer indications would have been found if they had originated the detailed body of stellar knowledge embodied in the poem of Aratus. In addition, Egypt lies too far south to be the locality where the constellations were first 'drawn'. The astronomical wisdom – and the star globe – that Eudoxus found in Egypt must have come from a different, non-Egyptian, tradition.

The gods of Mesopotamia

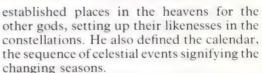
Throughout the second and first millennia BC the culture and influence of the great kingdom of Babylon was dominant in the Middle East. The Babylonian form of the Akkadian language became the lingua franca of this area and countries beyond it.

Part of the reason was that the priesthood promulgated very effectively the doctrine that their god Marduk should be the chief god of Mesopotamia and that it was heaven's will that Babylon should be the capital city. Marduk created order out of chaos, and



Above: an Egyptian ship of the second millennium BC. Such vessels carried merchants around the Red Sea and the Mediterranean

Below: a Phoenician war galley of 720 BC. The Phoenicians were reputed to be the first seafarers to navigate by the Pole Star



The belief that heavenly events controlled terrestrial ones was the mainspring of the Babylonians' extreme interest in the sky. A vast pseudoscience of astrology, with complicated rules for interpreting the kaleidoscopically changing patterns, grew up. The astronomer-priests became adepts at providing the ambiguous statements and pieces of advice that are the staples of astrology.

Among the clay tablets from the Babylonian ruins are star lists. They name the constellations and give their positions relative to one another. Many of the names are familiar to us: the Bull, the Twins, the Scorpion, the Archer. But instead of the Swan, the Lyre and the Charioteer, they had a panther, a goat and a bowl.

The philologist and orientalist Robert Brown was able to recreate a fairly complete list of Euphratean star names and constellation figures in use from about 2500 BC to 500 BC. The creatures and objects portrayed in the stars were predominantly the same as those we know. Having translated Aratus's poem, he showed that all but one of his statements are correct for the latitude of Babylon in 2084 BC. The one exception – a statement that the belt of Orion was on the equator – would be correct if it had originally referred to the head of Orion, not the belt.

Have we now reached the end of our search for the constellation makers? It is clear that the Sumero-Akkadian peoples of the Euphrates region were using a system of constellations essentially similar to that given by Aratus as far back as 2100 BC and probably for many centuries before that date. The Babylonian and Greek mythologies were basically similar, an indication of the





deep cultural and commercial influence of the earlier civilisation on the later one.

Other evidence also seems to point to the Sumero-Akkadian astronomer-priests as the constellation makers. Unlike the Egyptians' homeland, the northernmost parts of Mesopotamia are at the right latitudes.

We also know that ships sailed into the port of Agade from India and South Arabia in the 24th century BC, so that a navigational system of some sort for seafarers would be required. However, this sea traffic lay in latitudes far nearer the equator than the latitude derived from the *Phaenomena*. And so the Sumero-Akkadian solution to the mystery should be treated with some reserve. Let us consider the final candidate: the Minoans.

Before the beginning of this century the Minoans, whose homeland was Crete, were known only in mythology. Thucydides, writing in the fifth century BC, gives us part of the legend:

Minos is the earliest ruler we know of who possessed a fleet, and controlled most of what are now Greek waters. He ruled the Cyclades, and was the first coloniser of most of them, installing his own sons as governors.

One of the most fascinating legends concerning the kingdom of Minos is that of Theseus and the Minotaur. The Minotaur was half man, half bull, the monstrous offspring of the union of Pasiphaë, the wife of Minos, with a bull. Under the palace of Knossos, this dreadful creature roamed the labyrinth designed and built by the great architect, inventor and engineer Daedalus, until it was slain by Theseus. Daedalus was confined, with his son Icarus, in the labyrinth, but they escaped on wings that he had made. Icarus

Above: two constellations of the ancient Babylonians: a lion standing on the back of a winged serpent. These are our modern figures of Leo and Hydra. Here, however, they are shown 'from the other side' – facing left instead of right. The bright star is either Procyon or the planet Jupiter

Below: four ancient civilisations that flourished at different periods. One may have originated the constellation figures was killed when he flew too close to the sun, which melted the wax holding the wings together.

To most scholars in the 19th century, such tales were without foundation. But after Sir Arthur Evans's archaeological finds, which began in 1900, the world had to accept that the Minoans had indeed existed.

The island of Crete was ideal for human habitation. Forests clothed the hillsides; the land was fertile, giving sustenance to vines and olive trees, providing pasture for domestic animals. In the seas around, fish were plentiful, while the marshes and valleys abounded in game. Bees were kept for their honey. Yet hard work was required, producing an industrious, fit race.

Cretan commerce looked overseas to Egypt, Syria, Palestine and mainland



Greece. There was trade between Crete and Mesopotamia. By 2000 BC, Minoan ships were regularly carrying cargoes of oil and wine, pottery, silver, gold and jewellery to places throughout the Mediterranean.

The Minoans also occupied the islands off the Greek mainland. Kythera had a Cretan settlement, occupied continuously for over 800 years from 2300 BC onwards. Unlike the Cretan homeland, its end was not violent, though it was no less mysterious. Its people simply deserted it.

As Evans's work and that of other archaeologists progressed, it became clear that in 1700 BC some terrible disaster, probably a violent earthquake, destroyed the palaces. The Minoans recovered quickly and rebuilt their civilisation. In the new palaces of this second period whole communities of artisans, artists, architects and servants worked together to produce a beautifully harmonious, cultured and happy way of life.

The final catastrophe

And then, at the summit of the Minoan achievements, another widespread disaster occurred. It happened about 1450 BC. Archaeological evidence paints a haunting picture of palaces and settlements, hundreds of them, destroyed by fire and possibly by severe earth tremors and great floods.

The Minoans neatly fit the requirements that we deduced earlier for the navigator people. The date is right. The Minoan overseas trading empire was fast expanding between 3000 and 2000 BC. The latitude is right: Crete lies between 35° and 36° north. And the Minoans were the supreme sailors of their age.

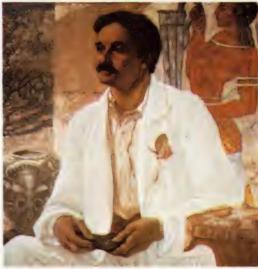
Now we saw that a serious problem arose if the theory was put forward that Eudoxus, during his studies in Egypt, was presented by the priests with the famous star globe and its attendant lore. For that globe was almost 2000 years out of date. Why had the makers of the globe not updated it? Did they not



Above: Theseus slays the Minotaur, in an Athenian vase painting of the sixth century BC. The Minotaur was a bull-headed monster, the offspring of King Minos's wife and a bull. A cult of bulls on Crete, traditionally the kingdom of Minos, may underlie the legend. Crete lies at the probable latitude of the first constellation makers

Right: Sir Arthur Evans, the English archaeologist who revealed the existence of a Cretan civilisation that he dubbed 'Minoan'

Left: a Minoan offerings table, intended for votive sacrifices, dating from about 1500 BC. It is decorated with the dolphin theme beloved of Minoan artists, evoking the close links that Cretan society had with the sea. The necessities of navigation could have stimulated the development of the Minoans' astronomical knowledge



notice the celestial changes? Astronomers as highly skilled as they were must surely have done so and would have provided their navigators with navigational aids that were not obsolete. It was suggested that something happened between 2300 BC and the date of Eudoxus's visit to Egypt, something that put the navigators out of business.

Is it sheer coincidence that, in the judgement of nearly all archaeologists who have studied the remains of Minoan civilisation on Crete and elsewhere, a sudden disaster occurred about 1450 BC that completely shattered the Minoan palaces, settlements and colonies? Was Eudoxus's star globe out of date because it was a survivor from the catastrophe that had occurred 1150 years before his birth?

On page 1298: an account of the disaster that overtook the glittering Minoan civilisation

UFOs can kill

EVER SINCE the post-war wave of UFO sightings began, a debate has raged among ufologists as to whether or not the objects seen in the sky are hostile.

Some researchers cling to the belief that a surveillance of this planet is being carried out by extra-terrestrial explorers. Others take this a step further and proclaim that 'space beings' come to the Earth to warn Man of the evil of his ways. Yet others believe that the extra-terrestrials – or meta-terrestrials, if one holds that they are denizens of 'parallel universes' (see page 598) – are engaged in a struggle for possession of the human race, and that they have no interest in human welfare.

Still other investigators claim that UFOS are psychically caused phenomena, while others counter by suggesting that UFOS may

Overwhelming terror, blindness and death resulted from three Brazilian UFO cases. CHARLES BOWEN gives an account of these frightening incidents cause manifestations of psychic phenomena. Lastly, there are those who have come to the conclusion that UFOS are mere products of the witnesses' imaginations.

On the whole, however, UFO researchers assume that they are dealing with a benign phenomenon. If human beings occasionally suffer harm from UFOs, they believe, it is either an unintended consequence of UFO activity that had no malicious purpose, or it was a purely defensive response.

In the cases discussed here, human witnesses of UFOS suffered temporary or permanent injury – and in one case, death. In two of them the injured people could be held guilty of provoking the trouble. Nonetheless, these incidents invoke the spectre first raised by H. G. Wells in *War of the worlds* – of attack on mankind by alien beings.



'An eerie orange light'

Close encounter of the second kind: São Vicente, São Paulo, Brazil, 4 November 1957 The Brazilian coastal fort of Itaipu is situated at São Vicente, close to the port of Santos in the state of São Paulo. To the two sentries patrolling the gun emplacements in the small hours of 4 November 1957, everything seemed quiet. Nothing warned them that within a few minutes they were to be put through a nightmarish ordeal that still lacks an explanation.

At 2 a.m. the sentries spotted a 'bright star' that suddenly appeared above the horizon over the Atlantic. It grew larger and the soldiers realised that it was approaching them at high speed. They were astonished by

this glowing object, which they thought was an aeroplane, but they gave no thought to sounding the alarm.

In a few seconds the UFO, travelling silently, reached a point high above the fort and halted. Then it floated down until it had stopped motionless some 150 feet (50 metres) above the highest gun turret, bathing the ground between the turrets with an eerie orange light. The object appeared to be circular and was, in the soldiers' words, about the size of a 'big Douglas' (meaning, presumably, a Douglas DC-6). The sentries could now hear a gentle humming noise that seemed to be associated with it.

Without warning, a wave of searing heat suddenly engulfed the men. Fire seemed to be burning all over their uniforms, while the humming intensified.

One sentry staggered, dazed, and then fell unconscious to the ground. His comrade managed to stumble into a relatively sheltered spot beneath one of the guns. But once there his mind seemed to give way: he was seized by horror and rent the air with bloodcurdling screams.

His terrible cries awakened the rest of the garrison, but within seconds the power supply cut off, lights went out and equipment failed. An officer tried to start the emergency generator, but that too failed. Meanwhile, the horrifying screams continued and confusion turned to panic in the dark subterranean corridors.

Suddenly, the lights returned. The officers and men who were first to get into the open were in time to see a great orange light climbing away vertically, before shooting off at high speed. The last of the soldiers to arrive found those who had preceded them examining the unconscious sentry while the

Three weeks later, an officer from the fort

who was interested in UFO reports sought out

Dr Olavo Fontes, who was involved in the

investigation of the famous Antônio Villas

Boas case (see page 1066). The officer had

been present at the fort during the incident

and, once he was satisfied that his name

would never be divulged, he gave Fontes full

details of the case. Dr Fontes approached

medical colleagues at the hospital, who con-

firmed that two soldiers were being treated

for severe burns, but would tell him nothing

could not publish an account. So the case

lingered in the files until mid 1959, when, by

chance, the doctor met three other officers

Without further corroboration, Dr Fontes

more about their case.

other was still crouched in hiding and crying hysterically.

In the sick bay both men were found to have 'first- and deep second-degree burns – mostly on areas that had been protected by clothes'. The sentry who had retained consciousness was in deep nervous shock and many hours were to pass before he could talk.

The fort's electric clocks had stopped at 2.03 a.m., which suggested that the whole nightmare experience had lasted no more than about four minutes.

Later that morning the colonel in command of Fort Itaipu issued orders forbidding the communication of the incident to anyone. Intelligence officers were quickly at work conducting an investigation, and a report was sent to army headquarters. Some days later officers from the US military mission arrived, together with Brazilian Air Force officers. Meanwhile, the sentries were flown to Rio de Janeiro and admitted to the Army Central Hospital, where a security net was promptly drawn around them.

who in the course of conversation confirmed what had happened. Thanks to the unauthorised disclosures of the officers who talked to Dr Fontes, the world has some knowledge, tantalisingly incomplete though urity net it is, of a UFO's unwelcome visit to Fort Itaipu on that terrifying night.

'Like an upturned wash basin'

Close encounter of the third kind: Pilar de Goiás, Brazil, 13 August 1967 Illiterate, simple, honest, trustworthy and reserved – this was how Inácio de Souza, a 41-year-old Brazilian ranch worker, was described by his employer. He was to meet a tragic end, apparently as a result of an encounter with a UFO in which, gripped by fear, he resorted to violence, and was repaid in kind.

On 13 August 1967, at about 4 p.m., de Souza and his wife Luiza, the parents of five children, were returning to the ranch after a shopping trip on foot to the nearest village. The ranch was near Pilar de Goiás, some 150 miles (240 kilometres) from Brasilia, the country's capital. The couple had almost reached the first building on the ranch when they saw three 'people' apparently playing on the landing strip. (The ranch owner, a well-known and extremely wealthy man, possessed several aircraft.) De Souza thought the trespassers were naked, but his

wife said they were wearing skin-tight yellow clothes. At the same time the intruders seemed to see the couple, and started to approach them.

It was then that de Souza spotted a strange aircraft at the end of the runway. It was either on or just above the ground, and looked like an upturned wash basin. The ranch hand suddenly became very frightened, unslung his .44 carbine, took aim and fired a shot at the nearest figure.

Almost immediately a beam of green light was emitted by the strange craft. It hit de Souza on the head and shoulder, and he fell to the ground. As his wife ran to his assistance she saw the three 'persons' enter the craft, which thereupon took off vertically at high speed, and with a noise like the humming of bees.

During the following few days, de Souza complained of numbness and tingling of the body, of headaches, and of severe nausea. On the third day he developed continuous tremors of the hands and head. The rancher was informed of the incident on that day, and he flew his sick employee to Goiânia, more than 180 miles (300 kilometres) away, where he was examined by a doctor.

'Burns' were discovered on his head and trunk, in the shape of perfect circles 6 inches (15 centimetres) across. The doctor thought they could be a rash produced by a poisonous plant. When he laboured this theory the rancher told him de Souza's story of the encounter with the UFO and its occupants. The surprised doctor proposed some tests of de Souza's faeces, urine and blood, prescribed an unguent for the 'burns' and expressed his opinion that de Souza had suffered an hallucination and that he had already contracted some disease. He made no



secret of the fact that he had no time for flying saucer stories, that he did not believe de Souza and that the whole affair should be hushed up.

The sick man and his employer stayed on in Goiânia for five days while investigation and treatment continued. When de Souza was discharged the illness had been diagnosed as leukaemia. The prognosis was poor: he was expected to live no more than 60 days. And he did indeed waste away quickly, covered with white and yellowish-white blotches. He died on 11 October 1967.

Did alien action kill the ranch worker?

The doctor in Goiânia might have wished to suppress de Souza's story because he feared the panic that such a disturbing tale could cause. This could have been the motive behind his 'hallucination' theory, which will not bear much examination. If de Souza did have an hallucination, then his wife shared it – unless she dutifully lied about her experience out of loyalty to him. And if there was a joint hallucination, then there must have been some agency responsible for causing it – an agency whose nature is as mysterious as the strange 'aircraft' and 'people' that the couple thought they saw.

'It's blinded me!'

Close encounter of the second kind: Itatiánia, Rio de Janeiro, Brazil, 30 August 1970 Brazil seems to have had more than its share of UFO incidents in which witnesses have suffered injury or even death. Only a few years after Inácio de Souza's disastrous experience, another Brazilian came to harm in a brief and terrifying encounter with a mysterious object. The victim on this occasion was Almiro Martins de Freitas, a security watchman who was on duty at the time.

The incident occurred at 9.30 p.m. on 30 August 1970. De Freitas, a married man with three children, was working for the Special Internal Security Patrol Service on the Funil Dam at Itatiánia, in the state of Rio de Janeiro. On this evening he was out on patrol, inspecting the area for which he was responsible. Heavy rain had just fallen and the ground was wet. He had almost come to the end of his beat when he saw a humpshaped mass on a mound, displaying a row of multicoloured lights. Orange, red and blue were among the colours of the light that the object was emitting.

De Freitas felt uneasy but he overcame his first instinctive urge to retreat as fast as possible. He began to move cautiously towards the object. Even when he had come to a distance of about 50 feet (15 metres) from the object, its shape was still unclear to him in the darkness.

At this point an intense noise assailed his

At this point an interior hoise assailed his

ears. It was like the sound of a jet engine, and it deafened him. Startled, he drew his revolver and started firing towards the lights. After his second shot there was a dazzling flash from the object, seemingly aimed at the security guard. De Freitas was blinded. He fired a third shot wildly, and then a wave of heat engulfed him. He found that he was immobilised.

Shortly afterwards another watchman and a passing motorist arrived at the spot. They found a surreal scene. De Freitas was standing stiffly by a mound of earth, brandishing his revolver and shouting warnings to them: 'Don't look! Beware the flash! It's blinded me!' The two newcomers contrived to carry the stricken man to the car. After a while he began to recover his ability to move, but he did not recover his sight.

A significant fact supporting de Freitas's account was noticed at the scene of the incident. At the place where he had seen the multicoloured lights there was a circular area of dry ground, despite the downpour that had soaked the ground elsewhere.

From Itatiánia the security guard was taken to a hospital in the city of Guanabara, where psychiatrists and ophthalmologists subjected him to psychological and physical examination. These tests showed that, physiologically, the patient was perfectly normal. His blindness, the investigators decided, had been brought about by shock. De Freitas became noticeably disturbed whenever he talked about the experience.

On 3 September the incident found its way into a number of Brazilian newspapers. At the time of these reports, although a full three days had elapsed, de Freitas had still not recovered his vision.

From this point the investigations were taken over by the government's security authorities, with a major role being played by the department assigned to study UFOS. Civilian UFO researchers who attempted to find out more about the case found that the official investigation was being handled with an air of secrecy. Evidently the Brazilian government took seriously this latest incident in the string of violent events involving UFOS intruding into its national territory.

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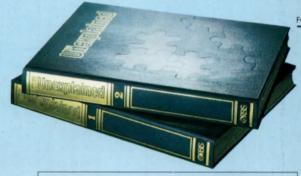
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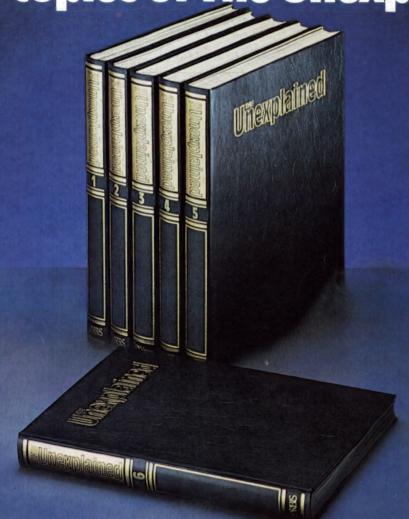
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